A-981
12:45
Image computing in radiology
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RECORDED
Learning Objectives

1. To become familiar with the principles and history of image computing (automated image analysis, artificial intelligence (AI), artificial neural networks (ANN), deep learning).
2. To learn about the opportunities of image computing in radiology.
3. To have a realistic view of the current and future role and impact of image computing to radiology.

Abstract

The 1970s was the decade that “computed imaging” radically changed the field of radiology. Today “image computing” has become sufficiently mature to have a similar influence on this discipline. In this talk the principles and history of image computing will be shortly summarized and its potential will be illustrated on clinical examples of computer-assisted detection, screening, quantitative measurements, evidence-based diagnosis, early outcome prediction of therapy, and imaging biomarkers. Exploiting this new technology is a logical evolution in the context of value-based health care and should therefore not be postponed or neglected. Instead, it should be considered as an opportunity and embraced by radiologists as an indispensable tool for quality assurance.